STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. MO-0086291

Owner: City of Exeter

Address: P.O. Box 113, Exeter, MO 65647

Continuing Authority: Same as above Address: Same as above

Facility Name: Exeter WWTF

Facility Address: Farm Road 1078 A, Exeter, MO 65647

Legal Description: NE¼, SE¼, Sec. 35, T23N, R28W, Barry County Receiving Stream: Unnamed Tributary to Flat Creek 3 (U) 303(d)

First Classified Stream and ID: Flat Creek 3 (P) (02397) USGS Basin & Sub-watershed No.: (11010002-060001)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

Outfall #001 - POTW - SIC #4952

Oxidation ditch / secondary clarifier / sand filtration / chemical addition to facilitate phosphorus removal / chlorination / sludge is being land applied.

Design organic population equivalent is 1,200.

Design average daily flow is 90,000 gallons per day.

Design sludge production is 16.8 dry tons/year.

Outfall #002 - POTW - SIC #4952

Peak flow holding basin.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

July 19, 2006

Effective Date

Doyle Childer.., Director, Department of Natural Resources Executive Secretary, Clean Water Commission

July 18, 2011 Expiration Date MO 780-0041 (10-93)

Cynthia S. Davies, Regional Director, Southwest Regional Office

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PAGE NUMBER 2 of 6

PERMIT NUMBER MO-0086291

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective upon issuance and remain in effect until **December 31, 2007**. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	INTERIM E	FFLUENT LI	MITATIONS	MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001						
Flow	GPD	*		*	once/month**	24 hr. total
Biochemical Oxygen Demand ₅ ***	mg/L		15	10	once/month**	****
Total Suspended Solids***	mg/L		20	15	once/month**	****
pH – Units	SU	****		****	once/month**	grab
Fecal Coliform	#/100 ml	1000		400 (Note 1)	once/month**	grab
Total Residual Chlorine as Cl ₂	mg/L	1.0 (Note 2)		1.0 (Note 2)	once/month**	grab
Total Phosphorus as P	mg/L			0.5	once/month**	grab
Ammonia as N	mg/L	*		*	once/month**	grab
Temperature	°C	*		*	once/month**	grab
Oil & Grease	mg/L	15		10	once/month**	grab

MONITORING REPORTS SHALL BE SUBMITTED **MONTHLY**; THE FIRST REPORT IS DUE <u>SEPTEMBER 28, 2006</u>. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

Whole Effluent Toxicity (WET) Test	% Survival	See Special Condition	once/permit cycle in August 2010	24 hr. composite		
MONITORING REPORTS SHALL BE SUBJUTTED ONCE DED DEDMIT CYCL E THE FIRST REPORT IS DUE OCTODED 20 2010						

MONITORING REPORTS SHALL BE SUBMITTED **ONCE PER PERMIT CYCLE**; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2010</u>. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

<u>Outfall #002</u> - Note 3						
Flow	GPD	*		*	once/day	24 hr. total
Biochemical Oxygen Demand ₅ ***	mg/L		45		once/week	24 hr. composite
Total Suspended Solids***	mg/L		45		once/week	24 hr. composite
pH – Units	SU	****		****	once/week	grab

MONITORING REPORTS SHALL BE SUBMITTED **MONTHLY**; THE FIRST REPORT IS DUE <u>SEPTEMBER 28, 2006</u>. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

PAGE NUMBER 3 of 6

PERMIT NUMBER MO-0086291

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective **January 1, 2008** and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFF	FLUENT LIM	IITATIONS	MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001						
Flow	GPD	*		*	once/month**	24 hr. total
Biochemical Oxygen Demand ₅ ***	mg/L		15	10	once/month**	****
Total Suspended Solids***	mg/L		20	15	once/month**	****
pH – Units	SU	****		****	once/month**	grab
Fecal Coliform	#/100 ml	1000		400 (Note 1)	once/month**	grab
Total Residual Chlorine as Cl ₂	mg/L	0.01 (Note 2) (0.13 ML)		0.01 (Note 2) (0.13ML)	once/month**	grab
Total Phosphorus as P	mg/L			0.5	once/month**	grab
Ammonia as N	mg/L	*		*	once/month**	grab
Temperature	°C	*		*	once/month**	grab
Oil & Grease	mg/L	15		10	once/month**	grab

MONITORING REPORTS SHALL BE SUBMITTED **MONTHLY**; THE FIRST REPORT IS DUE <u>FEBRUARY 28, 2008</u>. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

	0/	0 0 110 111	/ • 1	0.4.1
Whole Effluent Toxicity (WET)	%	See Special Condition	once/permit cycle	24 hr.
	Survival	•	in August 2010	aamnasita
Test	Buivivai		in August 2010	composite

MONITORING REPORTS SHALL BE SUBMITTED **ONCE PER PERMIT CYCLE**; THE FIRST REPORT IS DUE <u>OCTOBER 28, 2010</u>. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

<u>Outfall #002</u> - Note 3						
Flow	GPD	*			once/day	24 hr. total
Biochemical Oxygen Demand ₅ ***	mg/L		45		once/week	24 hr. composite
Total Suspended Solids***	mg/L		45		once/week	24 hr. composite
pH – Units	SU	****		****	once/week	grab

MONITORING REPORTS SHALL BE SUBMITTED **MONTHLY**; THE FIRST REPORT IS DUE <u>FEBRUARY 28, 2008</u>. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I, II & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u>, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

A. <u>EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</u> (continued)

- * Monitoring requirement only.
- ** Reports shall be submitted by the 28th day of the month following the reporting period, e.g. Reporting period is the month of March (samples collected daily or monthly), report due by April 28th.
- *** This facility is required to provide a 30-day average percent removal of at least 85%.
- **** A composite sample made up from a minimum of four grab samples collected within a 24-hour period with a minimum of two hours between each grab sample. A person may physically collect the four grab samples or a composite sampler may be set up to collect the four grab samples.
- ***** pH is measured in pH units and is not to be averaged. The pH for all facilities except lagoons is limited to the range of 6.0-9.0 pH units.
- Note 1 Monthly average limit for Fecal Coliform is expressed as a geometric mean. Geometric mean for $n \text{ samples} = [a_1 \ x \ a_2 \ x \ a_3 \ x \ a_n]^{1/n}$
- Note 2 This permit contains a Total Residual Chlorine (TRC) limit.
 - (a) This effluent limit is below the minimum quantification level (ML) of the most common and practical EPA approved CLTRC methods. The department has determined the current acceptable ML for total residual chlorine to be 0.13 mg/L when using the DPD Colorimetric Method #4500 CL G. from Standard Methods for the Examination of Waters and Wastewater. The permittee will conduct analyses in accordance with this method, or equivalent, and report actual analytical values. Measured values greater than or equal to the minimum quantification level of 0.13 mg/L will be considered violations of the permit and values less than the minimum quantification level of 0.13 mg/L will be considered to be in compliance with the permit limitation. The minimum quantification level does not authorize the discharge of chlorine in excess of the effluent limits stated in the permit.
 - (b) Disinfection is required year-round unless the permit specifically states that "Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31." If your permit does not require disinfection during the non-recreational months, do not chlorinate in those months.
 - (c) Do not chemically dechlorinate if it is not needed to meet the limits in your permit.
 - (d) If no chlorine was used in a given sampling period, an actual analysis is not necessary. Simply report as "0 mg/L" TRC.
- Note 3 Discharge from Outfall #002 (peak flow clarifier) is permitted only when influent flow exceeds the wet weather design treatment flow capacity for treatment works that discharges through Outfall #001.

C. SPECIAL CONDITIONS

- 1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.

Page 5 of 6 Permit No. MO-0086291

C. SPECIAL CONDITIONS (continued)

(c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

- 2. All outfalls must be clearly marked in the field.
- 3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.
- 4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 μ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μ g/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
- 5. Report as no-discharge when a discharge does not occur during the report period.

6. Water Quality Standards

- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
- (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses:
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;

C. SPECIAL CONDITIONS (continued)

- (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
- (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
- 7. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
 - (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
 - (b) If sludge is not removed by a contract hauler, permittee is authorized to land apply biosolids. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.
- 8. The permittee shall submit a report semi-annually with the Discharge Monitoring Reports (**on January 28 and July 28**) which addresses measures taken to locate and eliminate sources of inflow and infiltration into the City's collection system.

D. SCHEDULE OF COMPLIANCE

- 1. By **October 31, 2006** submit a completed application for construction permit, and one copy each of an engineering report, plans and specifications prepared by a professional engineer registered in the State of Missouri to the Missouri Department of Natural Resources, 2040 West Woodland, Springfield, Missouri, 65807, for providing wastewater treatment dechlorination improvements to comply with the final effluent limitations as list in Part A of this permit, designed in accordance with Missouri Clean Water Law Regulation 10 CSR 20 Chapter 8.
- 2. Within fifteen (15) calendar days of receipt of any request for additional information or changes in the engineering report, plans or specifications, respond and if necessary submit engineering modifications to the department.
- 3. Within 180 calendar days of issuance of the construction permit, construct the permitted wastewater treatment dechlorination improvements.
- 4. Within fifteen (15) calendar days of completion of construction of wastewater treatment dechlorination improvements, submit a Statement of Work Completed form, signed, sealed, and dated by a professional engineer registered in the State of Missouri certifying that the project has been completed substantially in accordance with the approved plans and specifications. In addition to the Statement of Work Completed, submit an application for a Missouri State Operating Permit modification complete with the appropriate modification fee to the Missouri Department of Natural Resources, 2040 West Woodland, Springfield, Missouri, 65807.

If you have questions you may contact the Missouri Department of Natural Resources, Southwest Regional Office by calling 417-891-4300 or by mail at 2040 West Woodland, Springfield, Missouri, 65807.